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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : To Be Assigned
Applicant(s) : MEYER, Jürgen et al.
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Title : Silica

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

PRELIMINARY AMENDMENT

Prior to examining the above-referenced patent application, please amend the application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 6 of this paper.

Amendments to the Specification

Page 1, after title, insert:

Introduction and Background

Page 1, after line 16, insert:

Summary of the Invention

Page 4, before "Examples", insert

Detailed Description of Invention

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend the claims as follows:

1. (Original) Silanised, structurally modified, pyrogenically produced silicas, characterised by groups fixed to the surface, wherein the groups are dimethylsilyl and/or monomethylsilyl.
2. (Original) Silanised, structurally modified, pyrogenically produced silicas according to claim 1, characterised by the following physico-chemical characteristics:

| | |
|---|----------|
| BET surface area m ² /g: | 25 - 400 |
| Average size of the primary particles nm: | 5 - 50 |
| pH value: | 3 - 10 |
| Carbon content %: | 0.1 - 10 |
| DBP value %: | < 200 |
3. (Original) Process for the production of the silanised, structurally modified, pyrogenically produced silica according to claim 1, characterised in that pyrogenically produced silica is treated by a known method with dimethyldichlorosilane and/or monomethyltrichlorosilane, the groups dimethylsilyl and/or monomethylsilyl being fixed on the surface of the pyrogenic silica, and is then structurally modified and optionally post-ground.
4. (Original) Process for the production of the silanised, structurally modified, pyrogenically produced silica according to claim 3, characterised in that a tempering takes place after the structural modification and/or post-grinding.
5. (Original) Use of the silanised, structurally modified, pyrogenically produced silica to improve the scratch resistance of lacquers.

6. (New) A silanised, structurally modified, pyrogenically produced silica having groups fixed to the surface wherein said groups comprise at least one of dimethylsilyl and monomethylsilyl.

7. (New) The silanised, structurally modified, pyrogenically produced silica according to Claim 6 having the following physical chemical properties:

| | |
|---|----------|
| BET surface area m ² /g: | 25 - 400 |
| Average size of the primary particles nm: | 5 - 50 |
| pH value: | 3 - 10 |
| Carbon content %: | 0.1 - 10 |
| DBP value %: | < 200 |

8. (New) The silanised, structurally modified, pyrogenically produced silica according to claim 6, which has a tamped density of 100 to 280 g/l.

9. (New) A process for the production of a silanised, structurally modified, pyrogenically produced silica of claim 6, comprising:

treating a pyrogenically produced silica with at least one of dimethyldichlorosilane and monomethyltrichlorosilane to thereby fix groups on the surface of the pyrogenic silica, said groups being at least one of dimethylsilyl and monomethylsilyl, structurally modifying said silica and optionally post grinding said silica.

10. (New) The process according to claim 9, wherein structurally modifying is by mechanical action.

11. (New) The process according to claim 9, further comprising tempering after at least one of structurally modifying said silica and post grinding said silica.

12. (New) The process according to claim 10, wherein mechanical action is by ball milling.

13. (New) The process according to claim 7, wherein post grinding is by air-jet mill or pin mill.

14. (New) The process according to claim 11, wherein tempering takes place under protective gas.
15. (New) A lacquer comprising a polyurethane and the silanised silica according to claim 6.
16. (New) A surface coated with the lacquer according to claim 15.
17. (New) The surface according to claim 16, which is metal.